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ABSTRACT

Based on the assumption that anxiety is not productive for composition students and that grades are frequently a source of anxiety for those students, a study was conducted to test whether grades and the way they were presented or withheld would create anxiety that would directly affect students' progress in composition. Seventy-four students, distributed over four sections of a composition course, participated in the study. Two instructors, each teaching an experimental and a control section, used the same syllabus and assignments for both of their sections. During the ten-week course, the students wrote five major compositions, which constituted the major portion of their grade. The compositions of students in the experimental groups were graded--but no grades appeared on the returned papers. Instead, the instructor told the students to read the comments on the papers and to expect no grades until the end of the course. Students in the control groups also received comments on their papers, as well as the assigned grades. Outside evaluators graded copies of the papers. The results showed that withholding grades did increase anxiety; however, there was no evidence that student writing skills improved or failed to improve as a function of withholding grades. (FL)

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Some Effects of Induced Grade Anxiety on
Motivation and Performance in Composition Sections*

Most teachers of composition and others who assign written work as a regular part of their courses know the sinking feeling when students who have just received their papers which have been carefully evaluated and laboriously commented upon look only at the grade, register what they imagine is a suitable response, and then ungraciously stuff the paper in the back of a notebook. Is there any way to insure that students will pay adequate attention to those hard wrought marginal and evaluative comments? What would happen, for example, if the grades were simply withheld by the instructor and the students were told to concentrate on the instructor's comments? Or is the anxiety which withholding grades may produce such a debilitating effect that the technique should never be used?

The research on writing and anxiety clearly shows that many writers, not just college freshmen in composition courses, experience writing apprehension (Daly & Miller, 1975) and physical (Crisp & Moldofsky, 1965) and emotional (Passman, 1976) discomfort when they are faced with situations where some writing is involved. John Daly has found that the writing apprehension which affects some college students is reflected in several observable features in their writing: students who are apprehensive tend to write shorter and less technically sophisticated essays (1977), and they

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have weaker writing skills (1978). Their apprehensive behavior is extended to the choices they make: they avoid majors and advanced courses which require heavy writing assignments (Daly & Shamo, 1978), and they choose vocations which they perceive as having the fewest writing demands (Daly & Shamo, 1976). These students who are apprehensive about writing are more frequently males who believe that they have not been successful in past writing experiences (Daly & Miller, 1975).

Commentaries based on Daly's research as well as the limited psychoanalytic and psychological research on the causes and effects of writing apprehension (Federn, 1957) argue in a consistent direction: apprehension and anxiety are bad for young writers and must, so far as possible, be eliminated from the teaching of writing. Several writers following on Daly's research have offered remedies for writing apprehension (Cope, 1978), which is seen as incompatible with an effective learning situation (Powers, Cook & Meyer, 1979; Gage, 1977; Seiler, et. al., 1978). Suggestions for relieving the anxiety of writing situations have included using writing groups (Scanlon, 1979), allowing students to work at their own pace on topics of their own choice (Newkirk, 1979), and eliminating deadlines (Dinan, 1979).

Grades as a form of summative evaluation of student writing are seen as a major contributor to writing anxiety. The psychoanalyst Paul Federn in a translated essay warns, "School writing should especially not be graded, for the mark constrains the pupil to write anyhow--when he has nothing to say" (1957, p. 689).

Richard Veit (1979) has proposed delaying any grade until the end

of the course and using it then only as a measure of student progress. While most commentators (Federn, Dinan, Gage, Powers) agree that grades are a direct cause of student anxiety about writing, few could get around the bureaucratic necessity for some letter or numerical summative evaluation of student work.

Bell and Price, on the other hand, in a limited study (1979) found that withholding grades may create a pattern of dissonance where the student experiences greater anxiety than normal but improves his or her writing at a slightly faster rate than students in control sections who received grades. Another study (Lynch & May, 1977) suggests that heightening the anxiety levels actually stimulated ninth grade students identified as high creatives. The present study, recognizing that environmental factors may play the largest part in the slow development of writing skills (Woodward & Phillips, 1967), sought clearly identifiable connections between anxiety induced by withholding grades and the rates at which students' writing skills improve.

Hypotheses

The widely held assumptions that anxiety is not productive for the composition student and that grades are frequently a source of anxiety for those students led to the hypothesis that grades and the way they are presented (or withheld) might create anxiety which would directly affect the students' progress in composition. To test that supposition the following hypothesis was formulated:

- H₁ Withholding students' grades will significantly increase the students' anxiety.

An assumption of most researchers is that anxiety is detrimental to the learning of composition skills. Those commentators would hold that the student needs to be free from constraint and threat when learning to write. Certainly those researchers would conclude that artificially induced anxiety would have a debilitating effect on the student's progress in writing.

However, a counter-argument can be offered. Uncertainty can be a great stimulus to learning as Berlyne (1965) has suggested in his discussions of epistemic behavior. So perhaps not knowing what one's grade is would motivate the student to concentrate on making a greater effort to improve than might ordinarily be expected. Epistemic behavior suggests that students who find themselves in states of uncertainty will work to resolve the conflict.

Following the first hypothesis, once anxiety has been introduced into a composition course by the instructor's withholding grades on essays, what do students do with this anxiety? To investigate the effects of induced grade anxiety on the progress of the writing process, two supplementary hypotheses were offered:

- H₂ Students who feel anxiety over the absence of grades they "have earned" will seek an outlet for that anxiety.

Certainly most students whose grades have been denied them until the end of the course might be presumed to react initially with mild surprise. Some, of course, will quickly bow to the teacher's authority in assigning grades; others may internalize their responses, and still others will quickly express their displeasure vocally.

The purpose of this study was to see what happened to that anxiety over a ten week term. One hypothesis, admittedly a hopeful one, was that students would translate their initial anxiety into improving their writing:

- H₃ Students may find an outlet for the anxiety they experience by not receiving grades through paying more attention than usual to the marginal and evaluative comments.

And the immediate corollary:

- H_{3a} Students who pay more attention than usual to the marginal comments and the evaluative comment will improve their writing skills at a faster rate than other students who do not pay undue attention to those comments.

An alternative response would be that students who experience anxiety because their composition grades have been withheld will find a delayed outlet by directing criticism at the instructor and his or her grading policy:

- H₄ Students who experience anxiety when their composition grades are withheld direct their frustration toward the instructor and the grading policy.

Subjects

Seventy-four students enrolled in a second term composition course of a two-course sequence at a large eastern state university served as primary subjects for this study. All students had successfully completed an initial composition course. The subjects were randomly distributed over four sections taught by two full-time instructors. The university's English placement test results and the verbal SAT scores showed a more or less equal distribution of student abilities throughout the four sections.

Procedures

Two instructors, each teaching an experimental and a control section, were used to diminish the possibility of bias on the part of a single instructor. The two instructors prepared the same syllabus and assignments for both of their sections. Every effort was made to give the students in the experimental sections the same conditions of instruction and evaluation as those students in the control sections.

The subjects were required to write five major essays during the ten-week course. The course itself was a second term composition offering stressing the techniques of written argument. The assignments for the course were designed to give the students practice with inductive and deductive reasoning, research and documentation skills, accommodation to different audiences, and drafting a refutation. The subjects were told that the five required writing assignments would constitute the major portion of their grade for the course.

During the second week of the course, the subjects handed in their first assignment. The papers were evaluated by the instructors, complete with extensive written comments, recorded with a grade based on mechanical correctness and how well the paper met the requirements of the assignment, and returned to the subjects the same week. (Photocopies of the original papers without instructors' comments or grades were made for the project's outside graders.) The papers of the subjects in the two control sections had grades at the top of the first page as well as extensive

comments, while the papers done by the subjects in the two experimental sections had similar extensive comments but, significantly, no grades at the top of the first page.

The students in the experimental sections immediately asked for their grades. They were told by their instructors that they would not be receiving a letter or numerical grade on their individual compositions until the end of the course. When they protested that they would not know how they were doing in the course, they were encouraged to concentrate on the comments provided in the margins and the major evaluative comment at the top of their essays. The subjects in the control section were also told to pay attention to these comments.

A few students in the experimental sections approached the instructors after class or during the first available office hour and asked privately for their grades. They were again told that they would not be receiving grades at this time on individual compositions, even though those grades did exist and had been recorded, and they were again encouraged to concentrate on the suggestions for improvements mentioned in the notes in the margins and at the top of the first page of their papers.

Significantly, not one student in either of the experimental sections elected to drop the section, even though that was an option. A small number pleaded for grades until the middle of the term when all subjects in the experimental sections seemed to have accommodated themselves--in one way or another--to receiving no grades on individual compositions.

Photocopies of these first essays without the home instructors' comments or grades were mailed to three outside evaluators (Professors Bruce Smith of Georgetown University, Sandra Hunt of Norfolk State University, and Melissa Kort of Cabrillo College). The outside evaluators were provided with copies of the assignments and asked to evaluate each of the seventy-four essays on the basis of mechanical correctness and success in meeting the requirements of the assignment. The outside graders were told that their responses to this first set of essays must be completed, recorded, and returned before they would receive the final set of subject essays.

The course was designed so that at least five class periods were given over to editorial workshops where sample student papers were read and commented upon. The sample papers were written to the common class assignments (though all students were encouraged to choose the subject matter on which they wished to write) and were presented to the class exactly as they had been submitted, except for the deletion of the authors' names. These workshops concentrated on the mechanical problems and stylistic lapses in the papers and the strengths and weaknesses of the arguments presented. (Anyone who has ever had his or her work submitted to similar editorial scrutiny knows how worthwhile and how humbling such an exercise can be.) Students in both the experimental sections and the control sections asked what grades the sample papers had received. They were never told the grade but rather urged to direct a focused comment to the author which would improve the next paper.

When the fifth and final essays were received, the papers were photocopied and sent to the three outside evaluators. The outside evaluators, of course, did not know which of the seventy-four students were in the experimental sections and which were in the control sections. They again assessed the papers on the criteria outlined above and returned their grades and comments. These three blind evaluations were used along with that of the home instructor to measure gross improvement in writing skills for each of the subjects and to measure any difference in the rate of improvement among the sections.

In the final week of the course students in the experimental sections were told their grades on each of their first four essays. Most said that they had already guessed their grades but just wanted to have their guesses confirmed. Also in the final week, students in the experimental and control sections filled out the university's instructional evaluation form, a set of questions allowing the students to rank the quality of the course and instruction along with a tear-off sheet for optional written comments.

Results

There was overwhelming anecdotal evidence from subjects in the experimental sections that withholding grades does indeed increase anxiety. Some of this evidence came in direct comments from the students to the home instructors; other times there were phone calls from academic advisors.

Fully one quarter of the students in the experimental sections wrote comments on the instructional evaluation form questioning the fairness or validity of the instructor's withholding of grades. Yet independent t-test analysis of data from the experimental and control groups yielded no significant results on the basis of either the overall course evaluation or specific items dealing with fairness of grading policy ($p > .05$). So the statistical data shows no clear evidence that students will direct any anxiety that they are experiencing back at the instructor, a possibility anticipated by H_4 .

While a significant positive correlation between scores of outside evaluators was obtained, $r = .57$, this was not a sufficiently high inter-rater reliability to allow for convergence of the data. Separate, independent t-test analyses were performed on both first and last essays, as assessed by each outside evaluator. No significant mean differences between experimental and control sections were detected ($p > .05$).

TABLE 1

Control vs. experimental sections grade averages and standard deviations for first and last essays for each outside reader.

<u>first essay</u>				<u>final essay</u>			
	control (n = 42)	experimental (n = 34)		control (n = 39)	experimental (n = 33)		
Reader A							
$\bar{x}$	70.09	70.91	ns	73.436	72.818	ns	
sd.	7.65	7.74		6.31	6.621		
Reader B							
$\bar{x}$	80.59	80.85	ns	80.256	79.515	ns	
sd.	8.11	7.08		7.20	6.78		
Reader C							
$\bar{x}$	76.523	79.029	ns	75.308	75.870	ns	
sd.	5.55	6.29		5.33	5.88		

There is no clear evidence, then, of either improvement or lack of improvement of student writing skills as a function of withholding grades. Withholding grades apparently did not automatically result in more epistemic behavior, an outcome associated with H_3 and H_{3a} .

Discussion

While it is evident, both from prior research and from the present study, that withholding grades creates anxiety in the learner, it is not clear that this anxiety automatically affects student performance. The present study into what happens when grades are withheld from students in an attempt to get them to concentrate on written evaluative comments demonstrated that such a strategy may be a less than valuable educational practice,

especially when practiced on a class-wide basis. However, just as the work of Lynch and May (1977) has demonstrated, gifted and highly motivated students seem to benefit from a strategy which raises their anxiety. Perhaps, then, the withholding of grades should be applied on a selective basis to those students whose performance has not yet matched their abilities.

The lack of any significant differences in the rates of progress between students in the control sections and students in the experimental sections may be a function of sampling fluctuation which would lead to Type II error. In the present study mean differences were in the direction of greater improvement among the subjects in the experimental sections, but those mean differences, at best, only approached significance. What is of interest is that the raising of anxiety by withholding grades apparently did not reduce the students' ability to improve their writing skills. Despite what other commentators have said about the harmful effects of anxiety on students who are learning composition skills, students can deal effectively with greater amounts of anxiety than we have given them credit for. Even if that anxiety does not lead to epistemic behavior which results in marked improvement in the rate of progress, the anxiety does not destroy the writers' confidence.

An additional factor to be weighed in aggressive teaching strategies aimed at challenging what the student knows in order to create conflict or dissonance is the way the student perceives the effectiveness of the instruction. Vasta and Sarmiento (1979) demonstrated that a more liberal grading policy, while not

affecting student performance, did improve instructor ratings. It would seem to follow from their study that a strategy of obscuring grades or making good grades more difficult to attain would result in more critical evaluations of the instructor by the student. Such was the case in the present study. While the statistical rating for quality of instruction only approached significance, students in the experimental sections overwhelmingly expressed their displeasure with the grading policy in their written comments.

The present study did not discover how all students deal with the anxiety they feel when their composition grades are withheld. A further study would have to monitor this anxiety very closely in the early stages of the course to determine how students in the experimental sections work through this uncertainty. Furthermore, if withholding grades does not lead to epistemic behavior which challenges the student to focus greater attention on the instructor's comments, what technique would lead to this behavior? Of course, instructors do not see what students do after they leave the classroom. Perhaps students do read the comments some time after the paper is returned, say, during the preparation of the next assignment. An alternative plan to the one used in this study would be to withhold the grades in selected cases until the corrections called for by the comments are made, or to deliver the grades in private office conferences where the message of the comments can be personally reinforced. Whatever fine tuning the strategy of withholding grades needs, the area is open for further, more sharply focused research.

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